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## South Africa's Agribusiness Sector - Competitiveness on the Decline

### Report Categories:

Agriculture in the Economy

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### Report Highlights:

How competitive is the South African agribusiness sector globally and how favorable is the competitive environment in which it must operate? This report measured and analyzed the competitiveness of the agribusiness sector in South Africa. Currently, the agribusiness sector in South Africa is in a declining phase in terms of its competitiveness status. The major reason for this trend is the reality that the South African competitive environment for agribusiness is currently less than optimal; rather, it is increasingly constrained.

### Executive Summary:

The aim of this report is to evaluate the changing business environment facing the agribusiness sector in South Africa and to measure the impact on the competitiveness status of the sector. The analysis is conducted through measures such as the "Relative Trade Advantage" method and the "Porter Diamond" analysis. Using the Agribusiness Executive Survey approach to mobilize the participation of executives and agribusiness leaders in South Africa, the analysis showed that the business environment for this sector is constrained with a negative trend since 2004. The impact of this situation is also confirmed by the Agribusiness Competitiveness Status index.

## **General Information:**

### **Author Defined:**

#### **1. INTRODUCTION**

The agribusiness sector worldwide is changing profoundly, and changes appear to be accelerating. Volatile food and energy prices, a major international financial crisis and a world economy in recession have contributed many new challenges to agribusinesses around the world. In addition global trends in the agro-food sector are driven by consumer behavior, alternative usages for food and new technologies.

Domestically, South Africa is emerging from a historically dualistic agricultural economy, induced by policy settings and historical resource endowments, comprising a well-developed commercial sector and a subsistence-oriented sector in the previous “homeland” areas. This historical dualism impacts dramatically on developments, policies and strategies of the South African agribusiness sector. Furthermore, the new Marketing of Agricultural Products Act, No 47 of 1996 spelled out a set of rules that differed quite significantly from earlier legislation. After being in a controlled marketing environment for more than 20 years, the agribusiness sector in South Africa was dramatically affected by these changes in marketing legislation which promoted a free market approach. Free trade agreements also reduced the import protection for the agribusinesses sector dramatically.

Competing under these conditions can be harsh, but given a global regulatory environment that entrenches the notions of international competition (on both regional and global level), South African agribusiness have simply no choice but to be competitive or it will not remain sustainable. But, how competitive is the South African agribusiness sector globally and how favorable is the competitive environment in which it must operate?

This report measured and analyzed the competitiveness of the agribusiness sector in South Africa, which operates in a dynamic and involving competitive environment. Three instruments were used, namely, the *Agribusiness Competitiveness Status index (ACS)*, based on the Relative Trade Advantage (RTA) method; the *Agribusiness Executive Survey (AES)*, based on the methods used by the International Institute for Management Development (IMD) and the World Economic Forum (WEF) to prepare the World Competitiveness Yearbook and the Global Competitiveness Report, respectively; and the trends in the *Determinants of Competitiveness index (ADC)*, based on the “new” competitiveness theory as described by Michael Porter of the Harvard University.

#### **2. DEFINING COMPETITIVENESS**

Three levels of competing can be identified: *Competitive survival* – the lowest level of competing - refers to the ability to adapt passively or reactively to changes in the competitive environment. *Competitive anticipation* - refers to the ability to anticipate and respond proactively to changes in the competitive environment by improving the qualities and activities of the business to become more efficient and flexible. *Competitive winning* - the ability to defeat your competitors by influencing and even “designing” the changes in the competitive environment through more efficient operation, innovation and better qualities than competitors.

With the above views in mind, competitiveness can then be defined as *the ability of a sector, industry, or firm to compete successfully in order to achieve sustainable profits and growth within the global environment while earning at least the opportunity cost of returns on resources employed. To compete means to try to gain or win something by defeating other competitors.*

#### **3. THE COMPETITIVENESS STATUS OF THE SOUTH AFRICAN AGRIBUSINESS SECTOR**

To measure how competitive the agribusiness sector in South Africa is, it is necessary to determine how successful the sector

sells its products over time in the local and global environment. The Relative Trade Advantage (RTA) method as originally developed by Balassa (1977, 1989), extended by Volrath (1991), and used by many scholars in recent years [these include Valentine & Krasnik, (2000), Esterhuizen & Van Rooyen (1999), Esterhuizen & Van Rooyen (2001), ISMEA, (1999), Pitts, O'Connell & McCarthy, (2001), Ferto & Hubbard, (2001)], allows for the measurement of competitiveness under real world conditions such as uneven economic “playing fields”, distorted economies and different trade regimes and are therefore the most suited for measuring competitiveness status.

### 3.1 The Agribusiness Competitiveness Status Index:

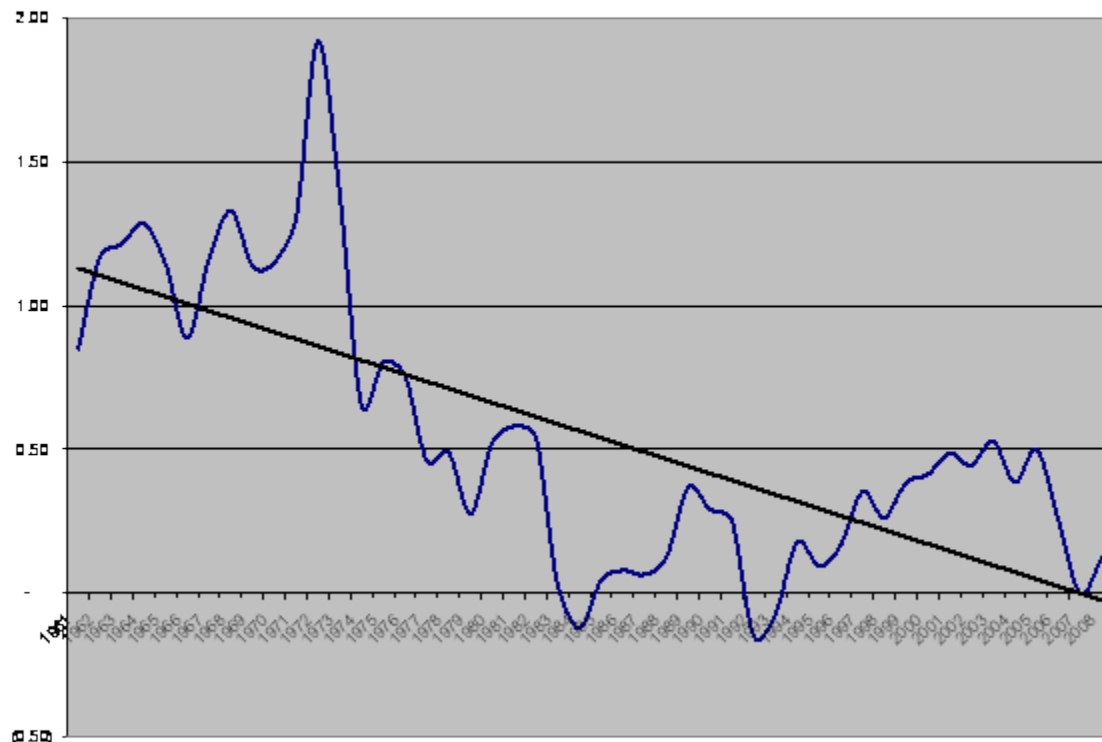
Using the RTA methodology an Agribusiness Competitiveness Status index (ACS) for South Africa was developed. The ACS from 1960 to 2008 is shown in Table 1 and illustrated in Figure 1. The ACS index has values at levels of less than one for most of the period which means that the competitiveness status of the South African agribusiness sector can be classified as generally marginal (not winning) in terms of global competitiveness [competitive ( $RTA > 1$ ), marginal competitive ( $1 > RTA > -1$ ), not competitive ( $RTA < -1$ )]. There is also a definite negative trend in the ACS index from 1960 to 2008. This implies that adjustments related to factors influencing the competitiveness status are needed to change the status to positive and turn the negative trend around. It will, however, be important to identify the particular set of factors required to facilitate the upgrade. However, the generalized classification of the agribusiness sector as having a marginally competitive status, disguises the varying rates of competitiveness between the different value chains within this sector. In some value chains South Africa is indeed very competitive; however, the aim of this report is to look at the agribusiness sector as a whole.

**Table 1: The competitiveness status of the South African agribusiness sector**

	RTA					Trend			
	2008	2007	2006	2005	2004	1960-08	1980 - 08	1990 - 08	2004-08
The ACS index	0.12	0.00	0.25	0.53	0.39	-	+	+	-

Notes: ‘+’ Positive trend; ‘-’ negative trend;

Competitive ( $RTA > 1$ ), marginal competitive ( $1 > RTA > -1$ ), not competitive ( $RTA < -1$ ).



### Figure 1: The Agribusiness Competitiveness Status index (1960 – 2008)

The trends in the competitiveness of the agribusiness sector in South Africa from 1960 to 2008 can be divided into four phases, namely:

**Phase 1 – Government supported competitiveness.** The first phase was during the 1960's and early 1970's. South Africa's agribusiness sector was relative competitive, with RTA values above one. This was mainly as a result of relatively low interest rates and low inflation. Subsidies and high protection from government also contributed to making the agribusiness sector more competitive during this period.

**Phase 2 – Constrained economic and political environment.** The second phase was from the mid-seventies to the early-nineties. Increasing political pressures by the international environment during the 1970s and the imposing of sanctions resulted in a huge drop in competitiveness. Political uncertainty and instability was at the order of the day. Interest rates were also relatively high. Also during this period the marketing of agricultural products were regulated by marketing boards. Note also the negative impact of the drought years of 1973/74, 1978/79, 1983/84, 1984/85 and 1992/93 on the competitiveness of the agribusiness sector in South Africa. The slight increase in the competitiveness of the agribusiness sector in South Africa from the mid 1980's to the early 1990's can be attributed to the first phase of deregulation that was introduced.

**Phase 3 – 'Madiba Magic'.** With the release of Nelson Mandela (Madiba) in 1990, economic sanctions were lifted, leading to international business exposure, access to international supply chains and increased investments. By 1997 the agribusiness sector was fully deregulated and operated in a free market environment. During this "magical period" the competitiveness index for the South African agribusiness sector increased from -0.15 in 1992 to 0.53 in 2003. The period from 1992 also indicates the start of the sharp and continuous decrease in the value of the Rand against the US\$. Although the devaluation of the Rand played an important role in making the prices of South African products more competitive, this was not the only reason for the improvement in competitiveness. This increase in competitiveness can also be attributed to the improved business know-how of South African agribusinesses; the elimination of non-competitive business; the delivery of quality products and an increase in labor productivity in the agribusiness sector.

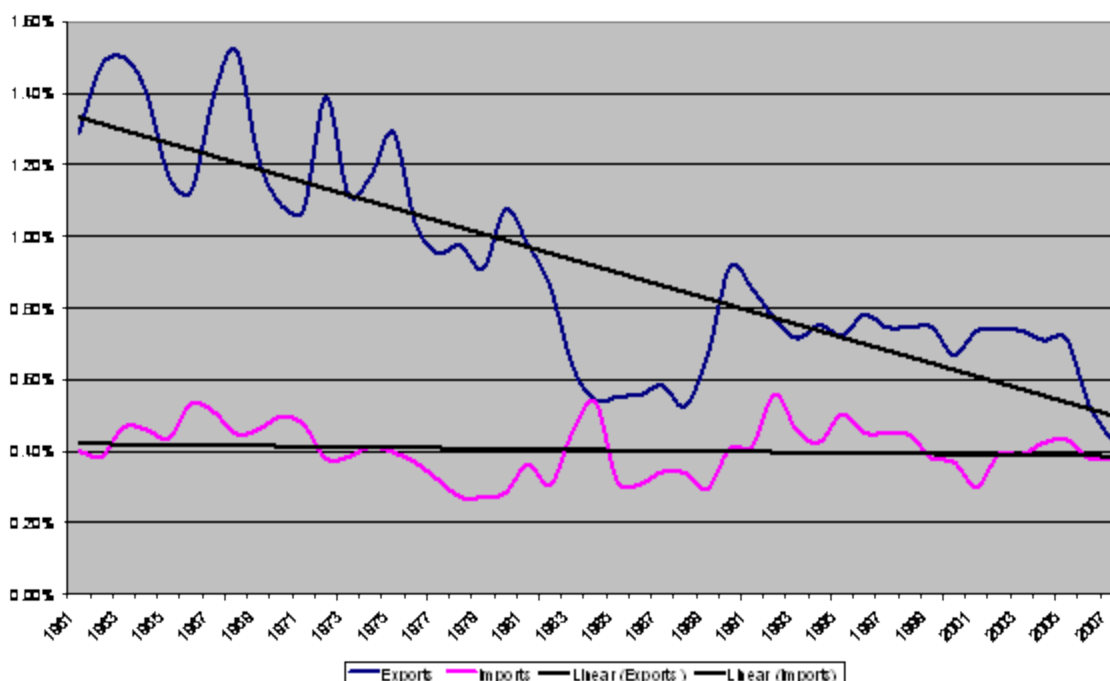
**Phase 4 – Constrained competitive environment.** Currently, the agribusiness sector in South Africa is in a declining phase in terms of competitiveness status. This negative trend in competitiveness started around 2004 after the definite positive trend in competitiveness which started in 1992 and lasted until 2004. The main reason for this decline in competitiveness is the increasingly constrained competitive environment in which the agribusiness sector operates. This constrained environment include factors like the increase in the value of the Rand, drought, the increase in interest rates, high crime levels, lack of infrastructure, lack of skilled labor and government's failure to provide sufficient regulatory and support services to the agribusiness sector in South Africa.

This downward trend in competitiveness is also in line with the findings of the WEF in their Global Competitiveness Report and with the findings of the IMD in their World Competitiveness Yearbook. In both of these publications the competitive environments of countries in which businesses much operate are measured and compared. In the WEF's Global Competitiveness Index, South Africa dropped from 36th position in 2006/07 to 44th position in 2007/08 and is currently (2008/09) in the 45<sup>th</sup> position. The IMD's World Competitiveness Yearbook for 2007 showed a 12-place drop in South Africa's ranking, from 38th to 50th out of 55 countries. In 2008 South Africa drop another three places to 53, however, in 2009 South Africa gain 5 places and is now 48<sup>th</sup> out of 57 countries.

### 3.2 South Africa's share of world trade in agricultural products:

The definition proposed above for and the measurement of competitiveness is based on the ability to sustain trade. Figure 2 shows South Africa's imports and exports of agricultural products as percentage of world trade in agricultural products for the period 1960 to 2008. From the figure it is clear that South African imports of agricultural products as percentage of world imports have stayed relatively constant over the past 50 years. This means that when "playing in their own backward" the South African agribusiness sector has stayed relatively competitive against other global competitors trying to gain local market share. However, South African exports of agricultural products as percentage of world exports show a definite declining trend over the past 50 years. This means when "playing in the markets of other countries" the South African agribusiness sector is losing its ability to

compete. A major reason for this scenario is the lack of support for global market development the agribusiness sector receives from the South African government.



**Figure 2: South Africa's imports and exports of agricultural products as percentage of world trade in agricultural products (1960 to 2008)**

#### 4. THE AGRIBUSINESS EXECUTIVE SURVEY

The aim of the AES is to determine the key success factors that establish a competitive advantage and the constraints that impact negatively on the competitiveness of agribusinesses. Using the executive survey approach, Esterhuizen *et al* have in 2000, 2002, and 2004 completed important studies in this regard. These investigations generated important new intelligence to inform the government and other important stakeholders. In 2008, the Agricultural Business Chamber of South Africa did a follow up on these studies to determine the current state of affairs regarding the competitiveness conditions in the agribusiness sector of South Africa and to see if there is any change in the business environment since 2004.

In the application of this descriptive methodology, the basic requirements that have an influence on the competitiveness of the agribusiness sector in South Africa such as infrastructure, primary education and macro economic stability as well as efficiency enhancers like higher education, technology, and efficient financial markets together with innovation and sophistication factors are described. The focus of this institutional analysis is at the firm level i.e. individual firms are requested to participate in the data gathering process through questionnaires. Executive opinions are thus gathered. Whereas the hard data in the ACS index is used to measure competitiveness status over a specific period, the survey data measure competitiveness as it is perceived. The Executive Survey offers many unique measures and captures the informed judgments of business leaders and decision-makers in the agribusiness sector on issues that influence their sector's competitiveness.

##### 4.1 Did the business environment changed since 2004?

In Table 2, the major constraints to the competitiveness success of agribusinesses in South Africa in 2008 are compared with that of 2004. From this analysis some interesting facts are revealed regarding the factors influencing the competitiveness status of agribusinesses in South Africa:

- From Table 2 it is clear that the top three factors constraining the competitiveness success of agribusinesses in South Africa are exactly the same in both years, namely: the cost of crime, trust in the political systems in South Africa and the low skill level of personnel in the public sector.
- Electricity supply is rated the number four constraint in 2008, reflecting the electricity shortages and electricity cost problems in South Africa. In 2004 electricity suppliers was one of the enhancing factors to the competitiveness success of the agribusiness sector in South Africa.
- The lack of skilled labor in South Africa moved up five places which indicate that the impact of this factor on the competitiveness of agribusinesses is becoming more severe.
- The cost of finance and the cost of transport were two new factors entering the top fifteen most constraining factors, mainly because of the constant increases in the interest rates in South Africa from 2006 to 2008 and the high oil prices in 2008 that resulted in an increase in the local fuel prices.
- The Rand at a value of R7/US\$ (when the 2008 survey was done) was not rated as one of the top fifteen factors currently constraining the competitiveness success of agribusinesses in South Africa. In 2004 at a value of R6/US\$, the Rand was rated to having the fourth highest constraining impact on competitiveness.
- The factors occupying positions eight to thirteen in 2008, namely HIV/AIDS (7), South Africa's labor policy (5), the cost of quality technology (13), quality of unskilled labor (14), South Africa's Land reform policy (9) and administrative regulations (6), were also present in the top fifteen most constraining factors of 2004 (position in 2004 are shown in brackets)
- In fact, ten of the top fifteen constraining factors in 2008 are exactly the same as in 2004. More worrying is the fact that the five factors that are pushed out (strong Rand, difficulty to start a new business, the situation in Zimbabwe, South Africa's BEE policy and the impact of the tax system on investment and risk taking) are replaced by three cost factors (cost of transport, cost of finance and the overall cost of doing business in South Africa) and two "lack of capacity" factors, namely electricity supply and the lack of sufficient scientific research institutions. These factors will have a direct influence on the ability of agribusiness in South Africa to continue to sell their products at competitive prices and the future sustainability of any competitive edge.
- It is also important to note that the average score for the top fifteen constraining factors in 2008 is much lower than the average score in 2004. This indicates that the constraining impact of these factors on the competitiveness success of agribusinesses in South Africa became more severe.

These findings are much in line with the Global Competitiveness Report published by the WEF in 2008. In explaining South Africa's drop in global competitiveness rankings, the five most problematic factors for doing business in South Africa were identified to be: crime and theft, inefficient government bureaucracy, inadequately educated workforce, restrictive labor regulations and inadequate supply of infrastructure.

**Table 2: The major constraints to the competitiveness success of agribusinesses in South Africa for 2008 and 2004**

2008		2004	
Factors	Score	Factors	Score
1) Cost of crime	1.57	1) Cost of crime	1.80
2) Trust in the political systems	1.66	2) Competence of personnel in the public sector	1.80
3) Competence of personnel in the public sector	1.70	3) Trust in the political systems	1.87
4) Electricity supply in South Africa	1.71	4) Strong Rand (R6/US\$)	2.55
5) Availability of skilled labor	2.15	5) South Africa's labor policy	2.60
6) Cost of transport	2.20	6) Administrative regulations	2.72
7) The cost of finance	2.51	7) Aids	2.85
8) Aids	2.59	8) Difficulty to start a new business	2.93
9) South Africa's labor policy	2.64	9) South Africa's Land reform policy	2.97
10) The cost of quality technology	2.64	10) Availability of skilled labor	3.00
11) Quality of unskilled labor	2.75	11) The impact of the tax system on investment and risk taking	3.05
12) South Africa's Land reform policy	2.78	12) Developments in Zimbabwe	3.33
13) Administrative regulations	2.80	13) The cost of quality technology	3.39
14) The lack of sufficient scientific research	2.92	14) Quality of unskilled labor	3.42

institutions in the agribusiness sector			
15) The overall cost of doing business in South Africa	2.95	15) South Africa's BEE policy	3.45
1 = major constraint		7 = major enhancement	

In Table 3, the major enhancements to the competitiveness success of agribusinesses in South Africa in 2008 are compared with that of 2004. The following points describe some of the major findings of the analysis:

- The top six enhancing factor to the competitiveness success of agribusinesses in South Africa are exactly the same in both years, namely: intense competition in the local market, availability of unskilled labor, the production of affordable high quality products, continuous innovation, investment in human resources and unique products, services and processes.
- Agribusinesses are positive about South Africa's macro economic policy.
- By analyzing the factors enhancing the competitiveness of agribusinesses in South Africa, it seems that it is the micro-economic environment and the strategies followed by agribusinesses that enable them to achieve sustainable competitiveness
- Ten of the top fifteen enhancing factors in 2008 are exactly the same as in 2004. However, the average score of the top fifteen enhancing factors in 2008 is lower than in 2004. This means that the positive impact of these factors on the competitiveness success of agribusinesses in South Africa is becoming less.

**Table 3: The major enhancements to the competitiveness success of agribusinesses in South Africa for 2008 and 2004**

2008		2004	
Factors	Score	Factors	Score
1) Intense competition in the local market	5.76	1) Availability of unskilled labor	6.50
2) Availability of unskilled labor	5.56	2) Production of affordable high quality products	5.85
3) Production of affordable high quality products	5.47	3) Intense competition in the local market	5.61
4) Continuous innovation	5.33	4) Continuous innovation	5.55
5) Investment in human resources	5.19	5) Investment in human resources	5.38
6) Unique products, services and processes	4.98	6) Unique products, services and processes	5.35
7) The availability of water for industrial purposes	4.76	7) Bargaining power of customers	5.30
8) Stringent regulatory standards in the industry	4.71	8) Strategy to employ quality technology	5.12
9) Production of environmental friendly products	4.71	9) Internet service providers	5.12
10) Availability of local suppliers of primary inputs	4.68	10) Quality of technology in South Africa	5.10
11) Strategy to employ quality technology	4.53	11) Availability of credit	5.08
12) Quality of local suppliers of primary inputs	4.53	12) Production of environmental friendly products	5.05
13) The efficient flow of information from the customer to the business	4.46	13) Biotechnology	5.03
14) Supply chain relationship with primary suppliers	4.44	14) Availability of local suppliers of primary inputs	5.03
15) South Africa's macro economic policy	4.40	15) Stringent regulatory standards in the industry	5.02
1 = major constraint		7 = major enhancement	

## 5. DETERMINANTS OF COMPETITIVENESS

In the ADC index the methodology of Porter (1990) is used to discover the determinants of competitiveness in the agribusiness sector of South Africa. According to Porter, there are six broad criteria or attributes that shape the environment in which firms compete and promote the creation of competitive advantage, namely:

- **Factor conditions** - the nation's position in factors of production, such as skilled labor or infrastructure, necessary to compete in a given industry.
- **Demand conditions** - the nature of home-market demand for the industry's products or service.
- **Relating and supporting industries** - the presence or absence in the nation of supplier industries and other related industries that are internationally competitive.
- **Firm strategy, structure and rivalry** – the way companies are created, organized and managed, as well as the nature of domestic rivalry.
- **Government attitude and policy** - government plays a vital role. Government can influence each of the above determinants, either positively or negatively, through policy and operational capacity.
- **The role of chance** - chance factors/events are occurrences largely beyond the power of firms (and often the national government). Such events can nullify sources of competitive advantage and create new ones. Agriculture operating in an “open” global environment, such as South Africa with its free market policies and limited government protection and subsidies, is highly prone to such influences.

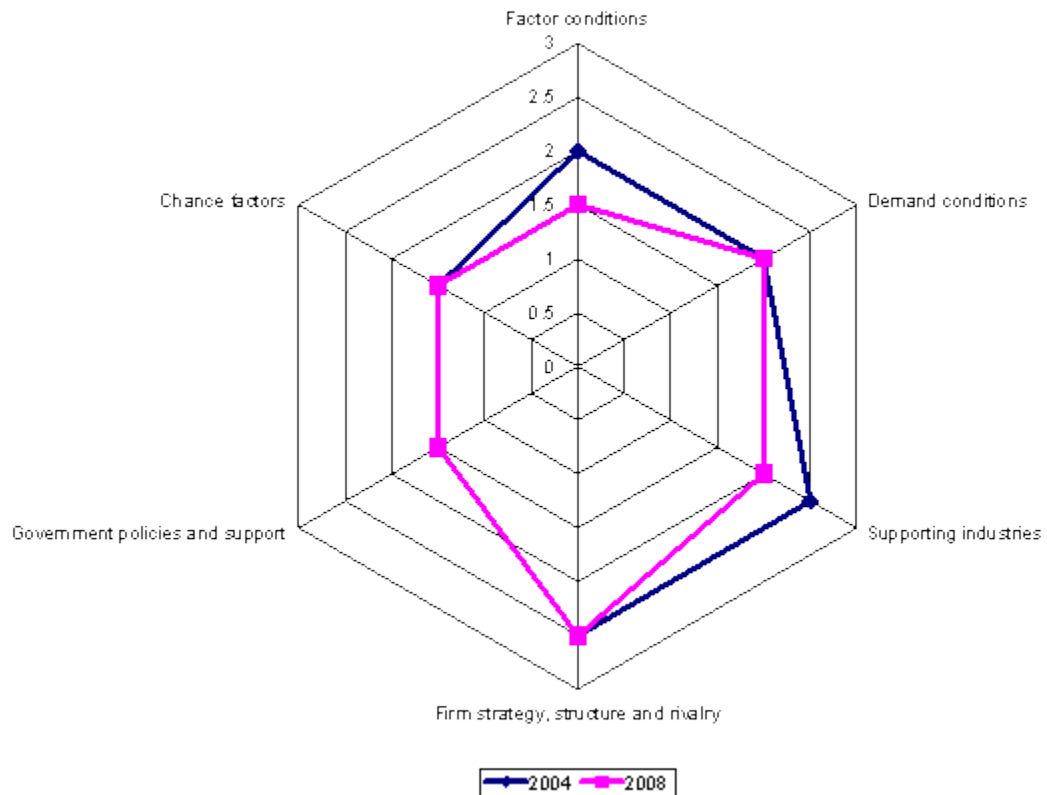
### 5.1 An increasingly constrained environment

The agribusiness sector in South Africa is generally marginally competitive and is currently in a declining phase in terms of competitiveness status. This trend is also illustrated in Figure 3 - the main determinants (Porter – Diamond) of competitiveness for the agribusiness sector in South Africa. In 2004, supporting industries and firm strategy, structure and rivalry were the key factors that provided the agribusiness sector in South Africa a global competitive edge. Two determinants had a moderate impact on competitiveness, namely factor conditions and demand conditions and two determinants had a negative impact on competitiveness, namely chance factors and government policies and support. If Porter's six determinants of competitiveness represent a “6-cylinder engine” it can be argued that the agribusiness sector in South Africa ran on three and a half cylinders in 2004.

In 2008, the agribusiness sector's competitive advantage lies with one determinant only, namely: firm strategy, structure and rivalry (unchanged since 2004). Supporting industries and demand conditions moved to have a moderate impact on agribusinesses in South Africa's ability to compete. Three determinants, namely factor conditions, chance factors and government policy and support, are now rated to have negative impacts on agribusinesses in South Africa's ability to compete.

Looking again at the “6-cylinder engine”, the South African agribusiness sector is currently only running on two and three quarters of a cylinder- almost one cylinder less than in 2004. The competitive environment for agribusinesses has deteriorated considerably over the past four years.



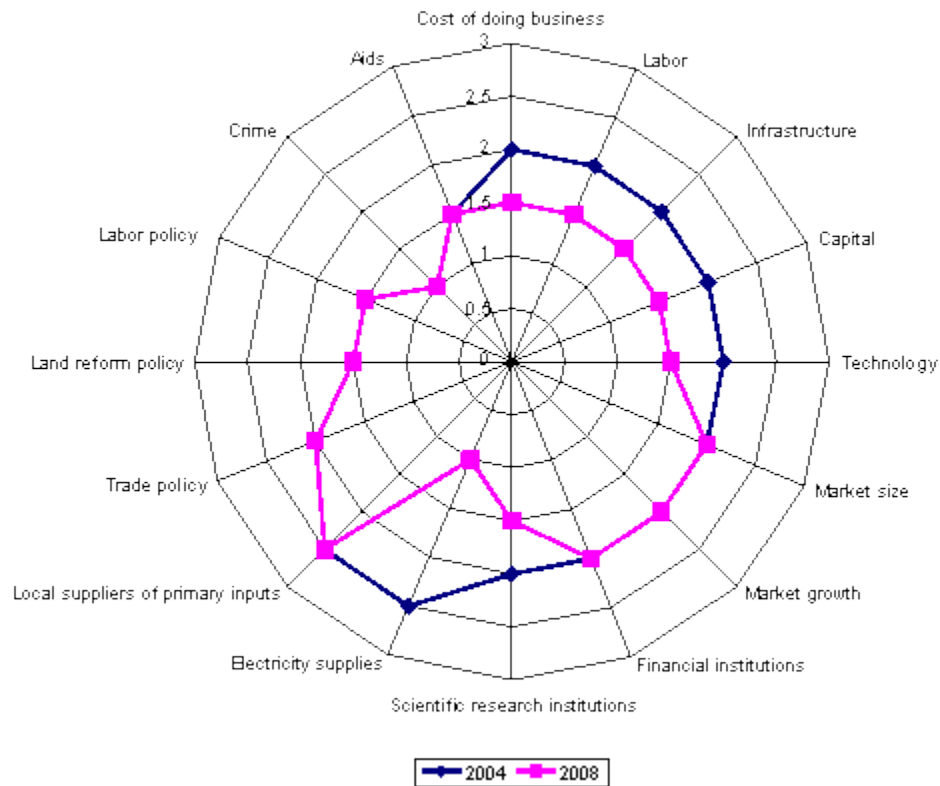


**Figure 3: Trends in the impact of the determinants of competitiveness on the agribusiness sector in South Africa**

*Notes: 1 = Constraint    2 = Moderate    3 = Enhancement*

In Figure 4 the trends in the impact of specific factors on the competitiveness of the agribusiness sector in South Africa are illustrated.

Seven factors shows a decreasing trend from 2004 to 2008 in their ability to enhance the competitiveness of the agribusiness sector in South Africa (none of the factors shows a positive trend). The cost of doing business, labor, infrastructure, capital, technology, scientific research institutions and electricity suppliers, all had a moderate positive impact on the competitiveness of the agribusiness sector in 2004. In 2008, the impact of these factors all shifted to having a constraining impact on the competitiveness of the agribusiness sector. The biggest shift happened with electricity power supplies. In 2004, it was one of the factors that give the agribusiness sector in South Africa a competitive edge globally, and currently it has a constraining impact on competitiveness.



**Figure 4: Trends in the impact of specific factors on the competitiveness of the agribusiness sector in South Africa**

*Notes: 1 = Constraint    2 = Moderate    3 = Enhancement*

## 6. CONCLUSION-OPERATING IN A CONSTRAINED COMPETITIVENESS ENVIRONMENT

The above describes the reality of operating in a highly competitive agribusiness world. It also points to the reality that the South African competitive environment for agribusiness is currently not optimal. Rather, it is increasingly constrained. The competitive environment is shown as currently less supportive than in 2004, explaining the negative trend in the competitiveness of the agribusiness sector in South Africa since 2004.